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STATUS REPORT FOR FUMIGANT PESTICIDES

December, 2001

I. 2001 SCHEDULED AIR MONITORING

The Air Resources Board (ARB) has conducted ambient air monitoring for methyl bromide, 1,3-dichloropropene, methyl isothiocyanate, MITC (generated from metam sodium), and chloropicrin during the 2001 pesticide use season. The air monitoring was completed during July and August 2001 in Kern County, and September through early November 2001 for Monterey and Santa Cruz counties. This monitoring should provide documentation of the impact of additional regulatory measures to mitigate the 2000 air monitoring levels.

ARB also conducted air monitoring at an application site for chloropicrin in Monterey County to document short-term exposure levels. The Department of Pesticide Regulation (DPR) collected side-by-side samples of methyl bromide for comparison.

Methyl bromide registrants are conducting air monitoring in high use areas of Ventura and Santa Barbara counties in 2001. The air monitoring is being conducted under the protocol and requirements agreed to under the June 26, 2001 reevaluation, and was completed during mid-August through early October.

II. ACUTE BUFFER ZONE MODELING

DPR utilizes a standard methodology to calculate buffer zones for acute exposures. Fumigant pesticide registrants and some grower groups have suggested some specific refinements to the current modeling methodology which they believe will improve the procedure and incorporate local information and more representative meteorological conditions. DPR will work with scientists from ARB, industry, and public interest groups to evaluate specific recommendations and consider possible refinements including use of regional weather files for modelling. This project was initiated in October 2001 and should be completed by January 2002.

III. METHYL BROMIDE

1. Risk Assessment/Data Evaluation

- DPR scientists are making final changes to the methyl bromide risk characterization document to incorporate the National Academy of Science peer review comments. The risk characterization document for methyl bromide will be ready for distribution in January 2002.

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2. Risk Management Status

- The subchronic management plan will be developed based on the results of 2001 air monitoring studies. DPR anticipates the 2001 monitoring results from the ARB and methyl bromide registrants will be available in the spring 2002. DPR will prepare an analysis of this data and a risk management response by June 2002.
- The California Rural Legal Assistance Foundation requested, and the Superior Court of California, Monterey County granted, a temporary restraining order for methyl bromide soil fumigation applications that impact the La Joya Elementary School and the Pajaro Middle School in Monterey County. DPR and the Monterey County Agricultural Commissioner must take actions to assure the atmospheric concentrations of methyl bromide do not exceed the target reference concentration. Additionally, they must implement other specified requirements. The Superior Court in Monterey County issued a preliminary injunction on November 5, 2001, consistent with the previous temporary restraining order, and with the additional requirement that the defendants take reasonable steps to complete the current testing as quickly as possible and provide a copy of that report to the plaintiff and the Court as soon as possible.
- The Environmental Defense Center et al lawsuit and the Ventura County Agricultural Association et al lawsuit have been consolidated and will be heard in San Francisco. Hearing was scheduled for November 13, but was rescheduled to December 6, 2001. No decision will be issued until sometime after December 6.
- DPR initiated a reevaluation of methyl bromide products June 26, 2001 because ambient air monitoring data from 2000 exceeded DPR's target exposure levels for seasonal (6 to 8 weeks) exposures. DPR required methyl bromide registrants to conduct ambient air quality monitoring in specific areas to document seasonal exposures during the 2001 high use season. The Camarillo/Oxnard area of Ventura County and the Santa Maria area of Santa Barbara County were monitored in 2001. The Coachella Valley area of Riverside County is to be monitored in early 2002.
- Revisions to the methyl bromide soil fumigation regulations were noticed in the California Regulatory Notice Register on December 14, 2001. This proposed action would make permanent the emergency regulation that is now in effect. These revisions eliminate restrictions limiting field fumigations next to public roadways, and correct an improper application equipment configuration. In addition, the proposed action would exempt employees involved in fumigation

handling activities from maximum work hour restrictions if National Institute for Occupational Safety and Health certified respiratory protection is worn. Public comment period closes on January 28, 2002.

IV. 1,3-DICHLOROPROPENE

1. Risk Assessment/Data Evaluation

- Utilizing local 1,3-dichloropropene use histories to developing future township use caps. DPR and Dow AgroSciences staff are jointly developing strategies to utilize local 1,3-dichloropropene use patterns to develop township-specific caps. Use of local data will allow some relief from the current statewide township use cap by removing some conservative default assumptions. For example, the current statewide cap assumes the worst case where the surrounding townships use are all at the cap limit. Obviously, townships adjacent to the ocean or mountains, or adjacent to townships with little or no use, are misrepresented by this worst-case scenario.

2. Risk Management Status

- 1,3-dichloropropene recommended permit conditions were revised on August 7, 2001. The revisions standardized maximum application at 332 pounds 1,3-D/acre with and without a tarpaulin. This is compatible with the Department of Food and Agriculture's 1,3-D approved method for nursery stock certification for nematodes.

V. CHLOROPICRIN

1. Risk Assessment/Data Evaluation

- On October 16, 2001, DPR placed all products containing chloropicrin into reevaluation. The reevaluation is based on data submitted under the Birth Defect Prevention Act. These data indicate that chloropicrin has the potential to cause adverse health effects at low doses. Air monitoring data submitted by the Chloropicrin Manufacturers Task Force indicate that the air levels of chloropicrin at some distances from treated greenhouses or fields could exceed the NIOSH standard of 0.1 ppm. Under the reevaluation, chloropicrin registrants are required to submit: (1) worker exposure studies for each type of chloropicrin fumigation site, and (2) ambient air quality monitoring and flux measurements from field and greenhouse applications, if methods other than the ones for which DPR already has data are to be employed.

- Chloropicrin is currently in the risk assessment process.
- ARB conducted air monitoring as described in Section I above.

VI. MITC GENERATING COMPOUNDS

1. Risk Assessment/Data Evaluation

- The DPR toxic air contaminant risk assessment for MITC is currently being revised to address comments taken during the public comment period. It will then be scheduled for a future Science Review Panel meeting.

VII. POTENTIAL NEW FUMIGANTS

- DPR is currently (December 2001) waiting to receive applications for California for products containing methyl iodide and propargyl bromide. Staff have discussed registration requirements and study methodologies with consultants, and have provided published studies and written protocols for guidance. A worker exposure protocol for methyl iodide was approved by the Committee on Human Research at the University of California, San Francisco. The study was conducted in Manteca, California on September 18, 2001.